
2001-2002 MARIN COUNTY GRAND JURY

**TITLE OF REPORT: Emergency Management and Operations
in Marin County**

Date of Report: June 19, 2002

EMERGENCY MANAGEMENT AND OPERATIONS IN MARIN COUNTY

SUMMARY

In the aftermath of the horrors of September 11, 2001, the 2001-2002 Grand Jury decided to assess the current state of readiness in Marin County to deal with a major catastrophe. Although the initial impetus for the study was a terrorist act, it became quickly apparent that the greater disaster probability for Marin would involve a natural event, such as an earthquake, wildfire, or flood.

Earthquakes, for example, are a common phenomenon in the Bay Area. The U.S. Geological survey has estimated that there is a 70% probability that one or more quakes with magnitudes of at least 6.7 will strike somewhere in the Bay Area within the next 30 years.¹ Fire is another easily foreseeable event with potentially huge consequences. One only has to recall the Oakland Hills fire to understand the magnitude of the potential for disaster. Mt. Tamalpais is generally considered to pose as great or greater a threat to residences and people as the Oakland Hills fire.

The Grand Jury concluded that Marin County's state of disaster readiness is good in certain areas and deficient in others. The Office of Emergency Services (OES) is currently well organized and staffed with professional and motivated personnel. Its mission is guided by an Emergency Operations Plan (EOP) that is reasonably comprehensive and is currently being updated.

On the other hand, the Emergency Operations Center (EOC) - the command center where decisions are made regarding the actual deployment of manpower and resources during an emergency - is woefully deficient. It is a place where as many as 75 emergency workers at a time may have to spend many hours, under stressful conditions, and where a work-friendly environment is an absolute essential. The Grand Jury found the EOC to be totally inadequate for its designated function, and it makes several recommendations in that regard. First, an appropriate and fully functional interim EOC should be established immediately, and, secondly, steps should be taken right away to locate and construct an "essential services" building to house a permanent EOC. It is regrettable that this recommendation, which was also made by another Grand Jury six years ago, must be made again.

There are other improvements needed in the area of Disaster Preparedness as well. For instance, the Marin Emergency Radio Authority (MERA) is a technologically advanced emergency communications system and a critical component of the County's preparedness scheme. For full coverage, it relies upon eleven linked antennas to

¹ Data obtained from the following web site: <http://quake.wr.usgs.gov/>

coordinate communications countywide among police, fire, paramedic, and other essential service providers; however, its planned antenna on Mt. Tiburon is now mired in neighborhood controversy. Since the system is designed as a single unit, any delay in completing the Tiburon antenna will preclude MERA from activating the system at all, thereby impacting the whole County.

Training of County employees designated to work in the EOC is also deficient. Attendance at classroom training sessions has been sparse and participation apathetic. A drill conducted in February 2002 demonstrated the rustiness caused by inadequate classroom preparation and by the absence of appropriate field training and drills. In this regard, the Board of Supervisors should adopt and immediately implement the new Marin Emergency Staff Development Program.

Despite the 9-11 wakeup call, public apathy remains a problem. Since ultimately Marin County residents must assume they will be isolated for up to 72 hours in the event of a major catastrophe, it is critical that all residents learn to become self sufficient and to understand how they can best help their neighbors in need.

Finally, it is the responsibility of the Board of Supervisors to give high priority to disaster preparedness. With their strong commitment, expectations can be communicated to department managers and others, and apathy within the ranks of County Government can be overcome.

BACKGROUND

Prior Grand Juries have issued reports dealing with disaster preparedness, most recently in 1995 and 1996. Response was spotty and implementation of recommendations relating to the Emergency Operations Center (EOC), the Office of Emergency Services (OES), training and exercises, and neighborhood involvement were given low priority.

The objective of this Jury's effort was to assess the capability of the County staff to comply with and execute the County's Emergency Operations Plan. The focus of the investigation is on the following:

1. The EOC facility
2. Command and organization structure of the OES
3. Training and drill/exercise schedules
4. Marin Emergency Radio Authority (MERA)
5. Apathy of the public and County staff

METHODOLOGY

Interviews and Site Visits

1. Representatives of Marin County governmental agencies: Office of Emergency Services (OES), Board of Supervisors, County Administrator, Coroner, Public Works, Sheriff, and MERA
2. City of San Jose Emergency Operations Center
3. Sonoma County Emergency Operations Center
4. Novato Fire District
5. San Rafael Fire Department
6. Marin Chapter, American Red Cross
7. Observed Marin County Exercise, *All Washed Up*, February 21, 2002
8. Observed Disaster Council Meeting, March 14, 2002

Document Review

1. Standardized Emergency Management System (SEMS) Guidelines, California OES, 1994
2. Marin Operational Area Emergency Operations Plan, Marin County Sheriff's Department, 1999
3. 1996 Marin County Civil Grand Jury, Disaster Preparedness of Marin County
4. 1995 Marin County Civil Grand Jury, Marin County Emergency Disaster Preparedness
5. Novato Millennium, Incident Action Plan, Novato Fire Protection District, December 2000-January 2001
6. Sonoma County/Operational Area Emergency Operations Plan, Sonoma County Office of Emergency Services, November 2000
7. Personal Responsibility for Emergency Preparedness, Mill Valley Emergency Preparedness Committee, 1994
8. All Washed Up Countywide Exercise, February 21, 2002 After Action Report
9. Marin Emergency Staff Development Program (MESDP), Marin County Sheriff's Department, April 2002

DISCUSSION

There are three broad categories of hazards that create risks:

Natural Hazards

- earthquakes
- floods
- wildfires
- extreme weather/storms
- landslides
- tsunamis

Technological Hazards

- dam failure
- hazardous material
- transportation emergencies
- biological and chemical agents

Domestic Security Threats

- civil unrest
- terrorism

A major earthquake is widely considered to pose the greatest probability for disaster in Marin County. Indeed, the US Geologic Survey (USGS) concludes there is a 70% likelihood of an earthquake of 6.7 or greater magnitude in the Bay Area within the next 30 years.² Studies conducted by the Association of Bay Area Governments (ABAG) show that a 7.9 tremor in the Bay Area portion of the San Andreas Fault would devastate Marin, leaving approximately 3,500 uninhabitable dwelling units, 8,100 people displaced, 70 road closures, and a peak shelter population of more than 2,200.³ These effects are reasonably comparable to those anticipated in the event of either a 7.1 quake along the Hayward Fault or a 7.2 earthquake on the Rodgers Creek and North Hayward Faults.

Fire is another easily foreseeable event with potentially ominous consequences. There were three major wildfires in Marin between 1882 and 1945, each consuming an average of more than 40,000 acres. The last of those, in 1945, burned 20,000 acres. Since then, nearly 60 years of new chaparral and evergreen forest growth have added fuels to the point that Mt. Tamalpais is generally considered to pose as great or greater a threat to residences and people as the Oakland Hills fire.

Marin County is justifiably proud of the beauty of its natural surroundings. However, its residential areas are largely confined to several miles on either side of the US 101 corridor, and 101 is also the single major transportation route, not only for County residents, but also for people traveling north from San Francisco. As such, it can easily be choked by overuse, with the result that Marin's residents can be blocked from escape or, worse yet, trapped in a disaster.

One has only to consider the threats outlined above, or to recall the 1982 Countywide flood or the 1995 Mt. Vision fire in West Marin, to realize the importance of disaster planning. So, are we prepared?

The Emergency Operations Plan

The Emergency Operations Plan (EOP) is a comprehensive document promulgated by the Board of Supervisors to ensure the most effective and economical allocation of resources for protection of people and property in time of an emergency. The EOP addresses all of the hazards listed above. It follows guidelines from the State of California contained in the Standardized Emergency Management System (SEMS) and local emergency planning guidelines provided by the State. The objective of the plan is to incorporate and coordinate all the facilities and personnel of the County and operational area jurisdictions into an efficient organization capable of responding to major emergency

² See information contained at <http://gov/bayarea/eqmanp/eqmaps.html> and subsidiary sites.

³ The peak shelter statistics do not include pre-disaster homeless, tourist or commuter displacements due to road closures, or people seeking shelter for reasons other than structural damage to their dwellings. Nor do these statistics attempt to cover the effects of secondary disasters such as toxic gas releases or fires.

situations associated with natural disasters, technological incidents and national security events in or affecting Marin County. The Plan addresses the entire spectrum of contingencies ranging from relatively minor incidents to large-scale disasters.

The Plan accomplishes the following:

1. Establishes the emergency management organization to be utilized to mitigate any significant emergency or disaster affecting Marin County.
2. Identifies the policies, responsibilities and procedures to be utilized to protect the health and safety of Marin County communities, public and private property, and the environmental effects of natural and technological emergencies and disasters.
3. Establishes the operational concepts and procedures associated with day-to-day field response to emergencies by County Departments.
4. Establishes the policies and procedures for the County Emergency Operations Center activities.
5. Defines the procedures for the recovery process.

The Marin County Board of Supervisors approved the EOP on May 25, 1999. It has not been updated with the exception of an added section on bio-terrorism issued in 2000. The next required revision, under SEMS, would be in 2003.

Emergency Operations Center Facility (EOC)

During a disaster/emergency, the Marin County Emergency Operations Center (EOC) performs two functions:

1. Supports field response operations within the unincorporated areas of Marin County. The primary emphasis is placed on saving lives, protecting property, and preserving the environment.
2. Serves as the operational area EOC for coordination and communications among cities, special districts and the State OES.

The Grand Jury toured the EOC and concluded that the existing EOC facility does not meet minimum requirements for an efficient and effective operation.

1. The EOC is located in the utility corridor of the Hall of Justice, midway between the Courts Floor and the ground floor. A door from the stairwell opens to a large U-shaped room of only 1200 square feet. The Civil Preparedness Agency and the County set up this "bunker" in September 1978. Fire safety and Occupational Safety and Health Act (OSHA) standards would normally allow a maximum of 25 individuals in this space, although up to 75 people could be needed at one time to staff the various stations in the unit.
2. There is a very small anteroom of about 150 square feet for the EOC Director and management team. This room also contains storage, computer servers and

electronic equipment. Uninterrupted power systems are available in the EOC, but not throughout the Civic Center. An auxiliary power generator can provide power for up seven days.

3. The ceiling is crowded with ventilation system ducts, water lines and electrical conduit. Some multiple outlets dangle on their cords from the ceiling. Fluorescent lighting is adequate although one bank of lights was not working in the Public Information Officer's (PIO) area during our visit. The Radio Amateur Civil Emergency Services (RACES) stations were cluttered with stored items. There is limited space to store emergency equipment.
4. There is no bathroom and no direct water line nearby. There are no fire extinguishers. A refrigerator contains a case of bottled water, but no food. Air conditioning and ventilation is inadequate.
5. There are only two computers of uncertain vintage. There are no laptop computers and a portable local area network (LAN) is lacking.
6. The EOC does not satisfy current Americans with Disabilities Act (ADA) requirements.

The present alternate EOC location is in the Civic Center Exhibit Hall. There is a computer LAN, 14 phone handsets and connections available. There is no backup power. Storage facilities to house supplies and essential radio equipment are currently being installed.

The EOC does not house either the Office of Emergency Services (OES), which oversees the disaster preparedness activities for the County, or the Department Operations Center (DOC) for the Department of Health and Human Services (H&HS), which manages declared health emergencies. The OES Office is located in an off-site location several blocks from the Civic Center. The DOC is presently located in San Rafael's Northgate Industrial Park. In both cases a location adjacent to the EOC would be desirable.

As recently as 1996, the Grand Jury noted many of the deficiencies cited above. From current observation, it is apparent that little progress in addressing these issues has been made.

Model Emergency Operations Center

Members of the Grand Jury visited two nearby jurisdictions to observe emergency operations centers. They were the City of San Jose and the County of Sonoma. Both possessed excellent physical and operational characteristics which could serve as models to Marin County planners to improve its present EOC situation.

The City of San Jose

1. Structure: The EOC occupies approximately 3100 square feet in a secure building which also houses the police, fire and 911 central dispatch center, the City communications center, the OES department, as well as parking for police, fire, paramedic and other services. The building itself is designed and built to conform to building code standards applicable to “essential service” buildings.
2. The Backup/Alternative: San Jose also has two backup EOCs. The first is the old EOC, which is located nearby, and a second located in a fire station about five miles away.
3. Information Technology: The City offices have a six-hour battery backup power supply for all computer applications. During the first six hours after a power outage, all necessary files and documents can be transferred to the EOC so that essential services can continue to function.
4. Operations: The EOC is turnkey. It is fully equipped and signs direct people to the area they are to staff. Each area has its own computer, phones and hard copy binders with essential information.

The County of Sonoma

1. Structure: The EOC is located in a secure, ground-floor location in the County Court House. The space totals 1850 square feet to be expanded to 4,000 square feet in six months. It houses the EOC and the offices for the Sonoma Operational Area Emergency Services. The facility has full standby power and computer redundancy.
2. Informational Technology: The EOC, when not mobilized, is used as an Informational Technology (IT) training room maximizing efficient space utilization.
3. Operations: Health or biological incidents are managed through the main EOC, not a separate EOC, as is the case in Marin. Approximately 75 persons can be comfortably accommodated in the center.

Both the San Jose and the Sonoma County EOCs have desirable architectural and functional layouts as do recently constructed facilities located in Alameda and San Mateo Counties.

An “essential services” building meeting current California building codes has, at a minimum, a seismic safety structure, backup power and utilities, perimeter security, tie-in with dispatch centers, computer capabilities and support for staff meals and breaks.

Plans for an Interim EOC

Plans to relocate the present EOC to an “interim” location to overcome at least some of the present EOC deficiencies are under consideration by the Office of Emergency Services (OES) and County Administrator. Such an interim location would be used for five years or longer, until a permanent “essential services” building could be constructed. Several sites are under consideration, including (1) the training and conference rooms (and adjacent offices) in the County Jail, (2) portions of the Hall of Justice, (3) the present alternative EOC in the Exhibit Hall and (4) off-site commercial space. While an improvement over the present facility, the interim plan does not provide for an “essential services” environment. The timetable for this move is dependent upon other departmental space assignments and relocations. A target completion date was originally planned as December 2002 but it appears that schedule will be significantly delayed. The desired objective is a space of at least 3000 square feet to house the EOC, the OES office and the emergency operations of H&HS. If approved, it could be designed for non-emergency alternative uses such as information technology training.

Plans for a Permanent EOC

The Board of Supervisors, in the context of a master site and space needs study of the Civic Center, has commissioned an investigation into the feasibility of constructing an “essential services” building near or on the Civic Center campus which would house the EOC, communications, dispatch center and other critical services. An essential services structure, in compliance with State codes, would be designed to withstand a major seismic event, be self-supporting with power, utilities, food and water for several days and provide a secure, limited-access environment. The timeline on development of such a structure, considering planning, funding and construction would span five years or longer.

Command and Organizational Structure

The organization responsible for emergency management in the event of a disaster is the Office of Emergency Services (OES). The Director of the OES is a member of the Board of Supervisors (BOS), selected to be the Director by fellow Board members. The position is not permanent, and a new Director from among BOS members can be selected annually. The Director is responsible for implementing the emergency operations plan (EOP) through the efforts of the County Sheriff’s Office. The OES Manager and his staff of four operate from within the Sheriff’s Department under a Captain in charge of support services. The Sheriff is an elected official and thus does not report to the BOS. Consequently, the OES staff comes under both the BOS and the Sheriff’s Department, with no clear separation of reporting lines.

The Director of an activated EOC, in the event of an emergency, is the County Administrator or his designee. During an emergency, the OES Manager becomes part of the management team under the County Administrator. Thus, the OES Manager

potentially has three bosses – the Board of Supervisors, the Sheriff and the County Administrator.

Training and Exercises

California's Standardized Emergency Management System (SEMS) provides guidelines that identify prescribed training and exercises for all primary and alternate personnel who staff emergency operation centers (EOCs). These include County employees whose primary job descriptions do not entail disaster work. For this reason, all County employees need disaster training.

Training

SEMS requires that its approved introductory course (and other EOC training courses as well) be made available for all personnel who perform a SEMS function in the EOC. There are four approved courses in the SEMS Training Curriculum. These courses are:

1. Introductory – provides a basic understanding of SEMS and what is required of personnel to work within the EOC.
2. Field – provides the participants with a solid understanding of Incident Command Systems.
3. Emergency Operations Center - provides participants an understanding of what is required by SEMS to manage a multi-agency/jurisdiction response to a major disaster or emergency from within the EOC.
4. Executive – provides a basic understanding of the operating requirements for EOC's and the role of a manager in the EOC.

Minimum training competencies are identified in the approved SEMS courses as performance objectives. The lead agency⁴ is required to ensure that training provided to Operational Area personnel is documented and kept in personnel files.

Marin's Operational Area Emergency Operations Plan (EOP), which is SEMS-based, addresses training and exercises and identifies training requirements associated with emergency management. All County departments with responsibilities under the Plan are required to ensure that their personnel are properly trained. The County OES is supposed to monitor and make certain that EOC personnel meet the performance objectives set out by the SEMS guidelines.

Currently, Marin's OES does not have a formal emergency management training plan in place. Traditionally, training has taken place based upon a current threat or perceived need. OES staff teaches the SEMS Introductory Module on average twice a month for

⁴ In Marin County, the lead agency is the Office of Emergency Services.

County, city/town, and special district employees. For the remaining modules (Field, EOC staff, and Executive staff), training is conducted by OES staff on an as needed basis.

The OES staff have undertaken formal instructor training with either the California Specialized Training Institute or the military. Each of the staff has at least two years experience in conducting emergency management training. The staff currently consists of four people. Additional OES staff and resources would allow for increased training activity. Another source of training personnel would be the use of staff from other County departments, but this resource is contingent upon the willingness of other agencies and departments to support the program. However, since training is only one of 13 functions identified in the OES mission, the effort to manage an increased training activity could interfere with other OES functions.

The following SEMS courses for County EOC staff are required:

- All staff SEMS Introductory Module
- Section Chiefs SEMS EOC Module
- EOC Director SEMS Executive module

In 2001, OES offered EOC staff training on 13 subjects covering both required and recommended emergency management courses. The training was designed to move from individual to team skills, although specialized individual skills were also offered. Unfortunately, County employee attendance averaged only 25% of available seats. Attendance by employees is not mandatory.

OES maintains a database of personnel who have attended OES sponsored training – including SEMS courses. Most of the currently designated EOC staff have attended at least one SEMS module.

Exercises

To ensure readiness to meet the activation of the EOC in the face of a disaster, the County, as the Operational Area, should conduct training exercises on a regular basis. As a minimum, SEMS recommends the following exercise program:

- One full-scale exercise during every four year cycle
- One functional exercise⁵ during each of the remaining years

The exercises may be conducted in conjunction with local governments and the regional (State) level. The County OES is responsible for the planning and conducting of emergency exercises for the incorporated cities/towns through a Memorandum of Understanding approved by the Board of Supervisors in 1998.

⁵ A “functional” exercise is one which is conducted without mobilizing the agencies involved.

According to Marin's EOP, exercises are to be conducted on a "regular basis". They are to include as many Operational Area member jurisdictions as possible. The OES is to document the exercises by conducting a critique, and by using this information to revise the EOP as appropriate.

Just as the OES does not have a formal training plan in place, neither does it currently have a formal exercise program in place. Under the pending training and exercise program (MESDP), OES will conduct annual County EOC section tabletop exercises and a biennial functional exercise. Presently, on average, the EOC management conducts one low level exercise per year. A full-scale EOC exercise has not been conducted in Marin within the last 10 years.

On February 21, 2002 the OES conducted a countywide functional exercise based upon a winter storm scenario. The exercise, called *All Washed Up*, involved 24 agencies and jurisdictions in nine activated emergency operations centers, as well as personnel in the Coastal Region EOC (State), and three emergency communications centers.

Post exercise evaluation by those participating in the exercise, as well as by outside evaluators, provided mixed opinions on the success of the exercise. On the positive side, the exercise gave many new participants an opportunity to experience "controlled chaos" in an emergency situation. It also demonstrated that many of the participants understood their responsibilities and tasks. However, other areas were identified as needing improvement, including the following:

1. The existing EOC facility does not meet minimum requirements. It is too small, noisy, and lacks adequate equipment and supplies. The combination of these deficiencies makes it difficult to carry out communications among/between participants. (Note previous discussion of EOC deficiencies.)
2. Lack of training among the participants was evident. There was a sense that some participants were uncomfortable with their designated roles and did not know their duties.
3. There was a lack of leadership presence in all aspects and at all times during the exercise. For example, one section (Finance) did not have any representation at any time in the exercise. There is a need to ensure someone has responsibility for every position. In some instances lack of sufficient advance notification of the exercise may have resulted in reduced participation.

Marin Emergency Staff Development Program

OES is in the process of developing a formal, comprehensive training program for all County employees and Emergency Operations Center staff. The Marin Emergency Staff Development Program (MESDP) will identify the required and recommended training courses for each staff position within the EOC, as well as minimum emergency preparedness training for all County employees and training for Building Evacuation Team members. As part of the pending comprehensive training program, OES will

propose to have all new employees and elected officials take the SEMS Introductory module and a safety class, as part of new employee orientation.

Under the new training program, EOC management (management section staff and section chiefs) will be required annually to take 16 hours of training and participate in 6 hours of exercises. Other EOC staff will be required annually to take 6 hours of training and participate in 4 hours of exercises. Once assigned as EOC management or staff, an employee will be responsible for fulfilling the required training and exercise obligations. Department heads, managers, and supervisors are to acknowledge and accommodate the employee's role as part of the EOC staff. To support staff in fulfilling their training requirements, a training fund will be established and administered by OES.

OES is also currently working to expand the number of EOC staff positions and the number of employees who will fill those positions. OES indicates that an EOC staff of 210 is required to sustain round the clock EOC operations. Once all EOC staff are identified, OES will compare the training records for each individual with the identified training requirements as indicated in the new training program. Those with deficiencies will be tasked to take the required courses. The process of identifying staff, evaluating training deficits, and organizing and conducting training is targeted for completion by early fall 2003.

The new training program is designed to establish an ongoing annual training cycle culminating in biennial exercises. This effort is to be coordinated with the efforts undertaken by all cities and special districts in the County.

The current OES management team has made significant strides to improve training and exercises and to thereby enhance the County's ability to function as an Operational Area in a disaster. Still, there are many shortcomings regarding training of EOC staff. The most recent exercise (February 2002) confirmed the need for additional training and more exercises to ensure that Marin County is ready to adequately respond to a disaster. Further advancements in training and exercises should result from OES's Marin Emergency Staff Development Program.

Marin Emergency Radio Authority (MERA)

The Marin Emergency Radio Authority (MERA) is a joint powers authority which was formed by 26 public service agencies in the County. It was formed in order to improve and coordinate public safety radio communications, which are currently out of date and inadequate. It is a technologically enhanced system and is a critical component of the County's disaster preparedness system. However, it remains mired in legal disputes over issues that continue to delay its activation and, in so doing, threaten the safety of the citizens of the County.

Last year, the Grand Jury investigated MERA and concluded that the system was badly needed but that its implementation was being delayed through a series of events that

should have been better anticipated and planned for. The reader is referred to the report, "Marin Emergency Radio Authority (MERA)", by the 2000-2001 Grand Jury. However, the following is a brief summary of the highlights of that report as well as a status update:

Statement of Need

In Marin County there are over 60 separate public safety and public service agencies, including police, fire, emergency medical, public works and other governmental users. Together they have over 2,000 mobile and portable radios which use over 200 different radio channels, most of which operate in low- and high-band VHF. Much of this equipment and its supporting infrastructure are 20-25 years old and use bandwidths which are becoming increasingly unavailable and overwhelmed by traffic demand. This often results in unintelligible communications due to multiple users attempting to simultaneously broadcast on a radio channel which is being shared by others. Furthermore, manufacturers are now producing equipment designed to be used on UHF, UHF-T, and 800 MHz frequencies, thereby making it increasingly difficult to find replacement devices and infrastructure for older equipment.

Last year's Grand Jury report cited two examples where the current system proved inadequate. One involved the Mt. Vision fire in West Marin a few years ago where mutual aid fire and police agencies were unable to effectively communicate and thus unable to efficiently coordinate their activities. The other was a police chase and subsequent shooting that involved several police jurisdictions along highway 101. Police officers in San Rafael were unable to communicate with a neighboring police department because they could not access a common frequency. More recently, the case for MERA was strengthened by the experience in New York during the 9-11 horror when police and fire officials were unable to communicate with each other on their low bandwidth communication systems.

Overview of MERA

MERA is a joint powers agency which created the specifications for a new coordinated communications system. It then let the contract to Motorola to design the system and provide the mobile and hand held radios as well as the senders, receivers, and dispatch infrastructure. It has also issued bonds totaling \$26 million to pay for the total package. The system relies on 13 fixed antennas located on sites both within and outside of the County. It was supposed to have been operational by December 2001.

Of the 13 antennas, 9 have been built and three more are nearly ready to be erected. The only one whose future is in doubt is one which is to be located on the Tiburon peninsula. That tower is critical to the system since it will be the only antenna in southern Marin County. MERA's preferred site for the antenna is Mt. Tiburon, and that site went through a full public EIR process. At no time during the publicly noticed hearings on the EIR (which included simulated photographs with the tower drawn in to

show how it would affect the landscape) did either the Town of Tiburon or any of its citizens raise any complaints. It was only later that the officials in Tiburon balked at the antenna, and the Town's Planning Commission voted it down. MERA has attempted unsuccessfully to find other locations.⁶ Meanwhile, equipment has been delivered to the County by Motorola, and much of it sits gathering dust in a warehouse. Just recently, however, MERA was successful in an eminent domain action to secure the Tiburon site and thus, the right to proceed with construction of the antenna.

The MERA system is too important to the safety of all of the citizens of Marin County to have it bogged down in a legal dispute in just one city. Unfortunately, it is MERA's position that the southern Marin portion of the system must be totally in place in order for MERA to activate any part of it at all. We understand that every police and fire chief in Marin (including Tiburon's) have written to the Tiburon Town Council members asking them to help break the logjam and let the tower be built. Ten other communities in Marin and two in Sonoma have accepted the presence of a MERA antenna and have put aside their own aesthetic concerns in favor of the health and safety of the County as a whole. The Town of Tiburon is the lone holdout.

While the threat of a terrorist attack in Marin may be slight, the threats of wildfires on Mt. Tamalpais and of major earthquakes throughout the County are not. The health and safety of perhaps thousands of the residents of this County may one day (and perhaps soon) be dependent on MERA being in place. It's time to get beyond politics.

Apathy of the Public and County Staff

Public and Government apathy toward Disaster Preparedness is a continuing and ongoing problem. The 9-11 attack brought the need for disaster preparedness to the forefront in the public mind. However, as the latter event recedes in time, advanced disaster planning is given less priority. It is human nature to believe that a large-scale disaster such as an earthquake, fire or terrorist attack happens to other people. To overcome this natural tendency, it is incumbent upon the local County and city governments to provide outreach programs for disaster preparedness. The 1995 Grand Jury Report on Disaster Preparedness also underscored this finding.

Public Awareness

The county has two main vehicles to promote public awareness:

1. Marin County Disaster Council (DISCO)

⁶ MERA attempted to persuade the State Parks Board to allow the antenna to be built on Mt. Livermore on Angel Island. Mt. Livermore is being restored to a natural state, and all non-natural conditions are being removed, including roads. Hence, both installation and later servicing are impossible. Other sites in Tiburon were investigated; however, none was included in the EIR. Therefore, selecting an alternative site would, at minimum, entail further EIR related delays.

2. A County web site

DISCO is an official advisory Council to the Marin County Board of Supervisors. Its purpose is to lead ongoing efforts to improve disaster preparedness countywide. DISCO consists of 16 voting members appointed by the Board of Supervisors. They meet once a quarter and report to the Board of Supervisors once a year. As authorized by Marin Code 2.99 *et seq.* DISCO's duties are to:

1. Review and evaluate disaster preparedness progress in public and private sectors
2. Promote disaster preparedness through communication and education
3. Report annually to the Board of Supervisors

One of the major accomplishments of DISCO is the promotion of Community Emergency Response Training (CERT). CERT is a 10-hour training class taught to Marin County residents by Marin County Fire Department personnel. The intent is to train and prepare volunteers to achieve a higher level of basic skills in:

1. Earthquake survival
2. Fire prevention and suppression
3. Search and rescue disaster first aid
4. Emergency preparedness.

After 9-11, the County received 150 requests for CERT training that required additional classes. CERT training is arranged by calling 389-4138 and the cost of the class is \$25.00. The Council is currently arranging for a class on Medical Preparedness that will teach first aid. The Council has set up a committee to look into post-disaster housing.

The County's web site⁷ includes disaster preparedness under "Emergency Education and Preparedness". The web site covers a wide variety of subjects such as Disaster Preparation Kits, the Emergency Alert System, CERT and disaster preparation for specific types of hazards such as earthquakes, fires, etc. The County is working to bring it up to date, including the capability to provide real time information about emergencies when they happen. The site is easy to access and is a good source of public information.

In the opinion of the Grand Jury, there is an opportunity for DISCO to expand its mission to include overall disaster preparedness policy development for the County and for its constituent cities, stronger plan coordination efforts, and priority setting in the allocation of grants and funding from state and federal sources.

⁷ The current web site is www.co.marin.ca.us/default.asp. This will soon become www.marincounty.com.

County Government Leadership

Overcoming apathy within the County government begins at the top with the Board of Supervisors. However, County leadership, except for one of the board members, is not fully involved as far as active participation is concerned. The next level of County leadership is the managers of the various departments within the County government. Currently, there are no written procedures outlining the specific responsibilities of department heads⁸ in the event of a disaster and department heads are not informed of EOP revisions.

FINDINGS

1. The Office of Emergency Services (OES) is currently well staffed and organized under experienced professional management. This highly motivated staff is working hard to update all aspects of the emergency service plans and operations.
2. The Marin County Emergency Operations Center (EOC) is in a seismically suspect room in the utility corridor of the Civic Center. The space approximates 1200 square feet, which is far short of the 3,000 – 3,500 square feet considered necessary for optimal performance in a major event, when between 65 and 75 people would need to be accommodated at one time.
3. In addition to space limitations, the present EOC location lacks bathroom facilities, a break area, feeding capabilities, noise suppression, adequate ventilation and capacity for more computer stations and communications equipment. It does not satisfy current Americans with Disabilities Act (ADA) requirements. A countywide functional disaster exercise held on February 21, 2002, highlighted a number of the physical and communication deficiencies described above.
4. The present alternate EOC is located in the Exhibit Hall at the Civic Center. There is limited computer and phone capability. There is no dedicated backup electrical power.
5. The OES is located on North San Pedro Road, some distance from the Civic Center. The Department Operations Center (DOC) of the Health and Human Services Department (H&HS) is located in San Rafael's Northgate Industrial Park. Their co-location with the EOC would be advantageous as observed in other jurisdictions.
6. The organization of the OES and EOC does not clearly delineate the responsibilities and functions among the Board of Supervisors, the Sheriff's Department, H&HS, and the County Administrator regarding the reporting lines of the OES staff.

⁸ The sole exception is the head of the County's Health and Human Services Department.

7. Plans to relocate the present EOC to an interim location to overcome identified deficiencies are under consideration by the OES and the County Administrator. The interim period could be five years or longer. Several sites are under consideration including administrative and conference areas in the County Jail, the Hall of Justice and off-site commercial space. A December 2002 completion date was originally targeted but is probably unrealistic.
8. The Board of Supervisors has commissioned a feasibility study to construct an "essential services" building which would house the EOC, communication department, dispatch center and other critical services. The timeline on development of such a structure, considering planning, funding and construction, would span five years or longer.
9. Outside funding from State and Federal sources is available for disaster and terrorism projects and can be used to support training and first responder equipment.
10. "State-of-the-art" EOCs in nearby communities provide evidence of the importance of well-designed, spacious quarters for disaster workers. They are models for future building plans in the County. The majority of Bay Area counties have, or are in the process of establishing, contemporary EOCs.
11. EOC primary and alternate staff requires more training. The majority of EOC staff have attended at least one SEMS module, though typically only the introductory course. Classes are offered through OES but attendance is sparse.
12. OES has not conducted sufficient exercises in the past. The recent OES exercise, *All Washed Up*, was well designed and executed, but confirmed the need for better-trained staff and regular exercises to practice required skills.
13. The Marin County Disaster Council is charged with encouraging public participation in disaster preparedness through its Community Emergency Response Training (CERT) program. An opportunity exists for DISCO to expand its mission to include overall policy development, stronger plan coordination and priority setting for grant allocation.
14. The Marin Emergency Radio Authority (MERA) radio communications system is designed and partially constructed. Final antennae installation in Tiburon is mired in a legal and neighborhood dispute over the selected site that could delay its completion beyond the end of 2002.
15. The Board of Supervisors and the County Administrator's Office appear to lack a sense of priority and urgency for disaster preparedness and the need for training and exercises among the County staff.

RECOMMENDATIONS

1. The present, inadequate Emergency Operations Center (EOC) should be vacated and relocated on an interim basis to a more secure and efficiently designed space of at least 3000 square feet. Implementation of the project should be expedited to assure its completion no later than the end of 2002. The Board of Supervisors, Sheriff, County Administrator, H&HS, and OES need to work in coordination to address this issue with a sense of urgency
2. The present alternate EOC should be upgraded to assure adequate communications as well as operational and utility sustainability, and to meet ADA requirements. If these standards cannot be achieved, a new location should be secured.
3. The Board of Supervisors should actively pursue an effort to construct a permanent essential services building to house the EOC, dispatch center, the OES, the DOC, communications operations, and other critical services. This building should meet current California building codes and have, at a minimum, a seismic safety structure, backup power and utilities, perimeter security, tie-in with dispatch centers, computer capabilities, and support for staff meals and breaks. A timeline of five years should be established to achieve this objective.
4. OES should move forward with completion of the Marin Emergency Staff Development Program. The Board of Supervisors should adopt it with a sense of urgency. Implementation of the program should commence immediately.
5. OES should conduct more frequent exercises. Participants should be made aware of the importance of the exercises and Department heads, managers and supervisors should support their staff and require participation.
6. The Board of Supervisors should encourage Department Division Heads within the county government to be more involved in supporting disaster preparedness. The Board of Supervisors should consider putting disaster preparedness in job descriptions and personnel evaluations and in the Mission Statements of the various departments.
7. The Emergency Operations Plan should be revised to clearly identify the separation and/or overlaps in responsibilities between the BOS, the Sheriff and the County Administrator relative to the operations of the OES office. The OES staff should have a clear understanding of the various roles and their reporting relationships to each of the major participants in emergency operations.
8. The Board of Supervisors should expand the mission of the Marin County Disaster Council (DISCO) to include policy development, planned coordination with other jurisdictions, and priority setting in grant allocation.

9. MERA should continue to work toward resolving the stalemate with affected parties in the Town of Tiburon relating to the construction of a fixed antenna. The involved parties should, to the extent they are not already, be made aware that delays in constructing the antenna in Tiburon compromises activation of the system for the entire county.

REQUEST FOR RESPONSES

Pursuant to Penal Code section 933.05, The Grand Jury requests responses as follows:

- From the Marin County Board of Supervisors to Findings 1 – 15; and to Recommendations 1 – 9.
- From the Marin County Sheriff to Findings 1 – 7, 9, 11 and 12; and to Recommendations 1, 2, 4, 5, and 7.
- From the Tiburon Town Council to Finding 14; and to Recommendation 9.